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ABSTRACT

Manufacturing employs a declining share of the U.S. labor force but is still the most important sector of Southern rural economies. Manufacturing has played a major role in reducing poverty in the rural South and is particularly important to economies where tourism, recreation, or commuting is not strong. Historically, manufacturers moved to the rural South as part of a low skill/low wage strategy; this strategy is now implemented through international relocation or has been put aside as some manufacturers shift toward more capital- and technology-intensive types of production requiring a more highly skilled and educated workforce. The low-skilled meat products industry and the higher-skilled auto industry are compared in terms of their growth in rural versus urban areas in the 1990s, education levels of the areas in which they expanded, and economic and demographic effects of their expansion. Rural areas with low education levels will not attract high-tech industries; the best opportunity for such areas may be to aim at attracting industries in the mid-range of skill requirements. However, challenges include lack of local resources to provide incentives for industry relocation; lack of a trained labor force; and quality-of-life considerations for relocating professionals, including quality of local schools. It is unclear whether low-education rural counties have the capacity to compete. (SV)

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David A. McGranahan

Rural South: Preparing for the
Challenges of the 21st Century
No. 22 September 2001

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THE RURAL SOUTH: Preparing for the Challenges of the 21st CENTURY

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The Importance of Manufacturing in the Rural South

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Introduction

This is the "Information Age," and national media have focused the public's attention on high-tech services and industries. Manufacturing, which employs a declining share of the U.S. workforce, is often seen as an old industry, a relic of the Industrial Age. But the websites of many states, counties and small cities or towns, both in and outside the South, make it clear that many communities want to attract and keep manufacturing plants. The lists of incentives offered in tax abatements and grants at all three levels of government can be staggering.

Why is there so much interest in a sector that lost jobs in the 1990s and will probably continue to lose jobs? First, much of the growth in high-tech services and industries has been in and around major metropolitan areas, where access to specialized services and highly skilled labor is most assured. This leaves the rest of the country scrambling for a larger share of other types of industries.

Second, manufacturing can anchor local economies. Except where tourism, recreation or commuting is involved, a rural service-based local economy cannot be built except at the expense of other towns. Some activity is needed to bring money into the local economy. Prisons, casinos and warehousing are new types of activities, but manufacturing is still the most critical sector to Southern rural economies. In 1997, according to Bureau of Economic Analysis data, manufacturing was responsible for 32 percent of private sector earnings in the nonmetropolitan South (see Table 1). This is a far larger share than in the metropolitan South, and not much smaller than 30 years ago.

Third, manufacturing is relatively footloose. While manufacturing jobs declined nationally in 1989-97, more than 1,200 nonmetropolitan counties gained in manufacturing during this period. In these counties, manufacturing created roughly half a million new jobs, expanding manufacturing employment by 22 percent. Outside of areas attractive to tourists or on the outskirts of expanding metropolitan areas, service

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sector jobs are most likely to expand where these manufacturing jobs have moved.

Finally, although it receives little emphasis, manufacturing has been important for reducing poverty in the rural South. Whether county education levels are high or low, counties specializing in manufacturing (where over 20 percent of the jobs are manufacturing jobs) are much less likely to have high poverty than other rural counties with comparable education levels (see Figure 1). For workers lacking a college degree, manufacturing jobs generally offer more full-time work at better pay than most services industry jobs.

Table 1. Private sector earnings by industry in the South.

	Nonmetropolitan		Metropolitan	
Industry	1969	1997	1969	1997
	Percent			
Agriculture	14	6	3	1
Mining	3	2	2	2
Manufacturing	33	32	28	18
Private services	50	60	68	79
Total	100	100	100	100

Source: Bureau of Economic Analysis REIS files.

While research on the issue is still somewhat speculative, the link between manufacturing and lower poverty appears to be more than just a question of wage levels. Unlike most services industries, manufacturing employs a relatively high proportion of men. There is evidence that two-parent families are more prevalent where better job opportunities are available for men. The explanation is largely economic. If men are unable to contribute financially, the advantage of two-parent families is reduced. Thus, among counties with the same race/ethnic mixtures, the higher the proportion of jobs that are manufacturing jobs, the higher the proportion of two-parent families. Although there is less sex-segregation of jobs than in the past, enough remains that imbalances in job opportunities can occur, particularly given the rapid expansion in services industries.

The changing nature of manufacturing

Historically, manufacturers moved to the rural South as part of a low-skill/low-wage strategy, to produce at the lowest possible cost. Wages in the rural South were lower than in other regions, and unions were relatively weak, so the shift made sense. Beginning in the late 1980s, however, this strategy became less and less viable. On one hand, newly industrializing countries with wage levels far below the rural South increased their exports to the United States, a trend that accelerated with international trade treaties. Shirts and blouses could be sewn in Malaysia at far less cost than in the United States. Companies that previously would have moved to the rural South, instead moved to Mexico.

On the other hand, new competitive strategies stressing product quality began to emerge. These strategies called for more quality control and greater attention to the demand of particular customers or market segments. While it is difficult to separate cause and effect, the development of this alternative strategy was permitted by technological innovation, particularly in the use of microprocessors in design, production, inventory and marketing. It was accompanied by new management strategies that stressed worker involvement. These new technologies and practices required fewer, but more highly skilled workers and more worker training.

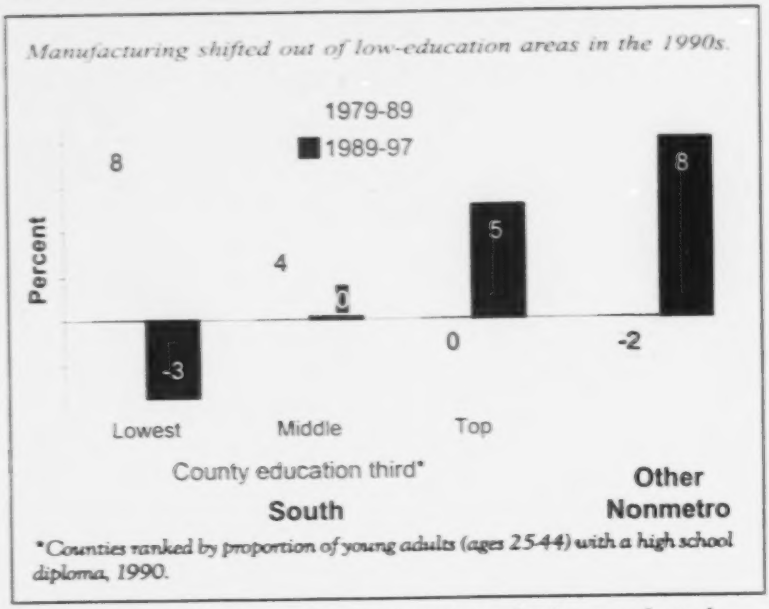
These changes helped revitalize U.S. manufacturing, but in the process changed its locational preferences, particularly with respect to the rural South. In the 1980s, manufacturing job growth was largely confined to rural areas where education levels were low (most of them in the rural South), but manufacturing declined in these same areas in the 1990s (see Figure 2). Much of this was attributable to declines in apparel and textiles. Meanwhile, industries that shifted to the South in the 1990s, most notably the auto industry, tended to seek more urban areas or areas with somewhat higher education levels.

The results of a 1996 ERS survey of rural manufacturers indicate that manufacturers in areas of low education were less likely to adopt new technologies and strategies [3]. Those that managed a high level of adoption often reported major problems, both in the ability to attract managers and professionals to the area and in finding workers with appropriate skills. For instance, 34 percent of the New Technology manufacturers in low-education areas reported that the ability to attract plant managers and professionals was a major problem for their competitiveness, compared with only 14 percent of the same type of manu-

amounted to 42 percent, less than their gain in employment and suggesting a shift toward lower skill services. Projected services industry gains for 1998-2008 are higher, 47 percent, which is essentially the same rate of gain expected for manufacturing.

In large part, these projections suggest that the trends of the past decade will continue into the next. If we assume the projections are reasonably accurate, they suggest a continued shift from low-skill/low-wage manufacturing toward more capital- and technology-intensive types of production requiring greater skills and offering higher pay and benefits. Nonetheless, the bulk of growth in jobs will be in services industries, which pay relatively low wages to low-skill workers. In general, these services industries are much more locationally bound than manufacturing, dependent on the size and growth of the local population and other industries.

Figure 2. Change in nonmetropolitan manufacturing jobs, 1979-89 and 1989-97, by county education level.



Rural areas of the South with relatively high education levels should continue to benefit from these manufacturing trends. The future is less certain for areas with relatively low education levels. Employment in apparel and textiles industries, the mainstay of many low-education areas in the South, has continued to decline, and further declines are projected. Some low-education areas have lumber, wood products and furniture industries. These are not projected to grow, although the rural South has benefited from a shift in these industries to the South. Food processing, particularly meat products, is a relatively low-skill industry that did grow in low-education areas in the rural South in the 1990s and may continue to do so.

It is useful to compare meat products and auto industries because they represent two different types of industrial growth and have very different effects on poverty. Both added about 60,000 wage and salary jobs in the South during the 1989-97 period, according to County Business Patterns. Meat products manufacturers, seeking rural settings and low-cost labor, tended to expand into Southern rural, low-education areas. More than half the Southern gain in jobs went to rural counties that ranked in the bottom two-thirds in young adult (ages 25-44) high school completion rates. Only a quarter of the gain was in urban areas. In contrast, the auto industry, which has been shifting toward new technologies and management practices, needs more highly skilled and trainable workers. Over half the new Southern auto industry jobs were urban, and less than one in five went to a low-education county.

While it is difficult to sort out all the factors that affect poverty in the rural South, it appears that the growth in meat products industries had mixed effects in the counties where it occurred. In counties with relatively large Hispanic populations, gains in meat products jobs were associated with reductions in poverty, most likely because these jobs went to local residents. In other counties in the rural South, however, expansions in meat products were often accompanied by an increase in the Hispanic population. This was true even where poverty rates were already fairly high and there was presumably a plentiful labor supply. Rural Southern counties with a significant proportional increase in Hispanics in the 1990s had less reduction in poverty in 1989-97 than other rural Southern counties. Thus, while the impact undoubtedly varied from county to county, growth in meat products employment outside of Hispanic areas generally did not reduce poverty.

facturers in high-education areas (see Figure 3). This suggests that low-education areas will have problems not only in attracting advanced industries, but in attracting and keeping an entrepreneurial population.

At the same time, those using advanced methods and technologies tended to pay their workers better and offer more benefits, such as health and life insurance. This was true even in comparing plants producing the same kind of product.

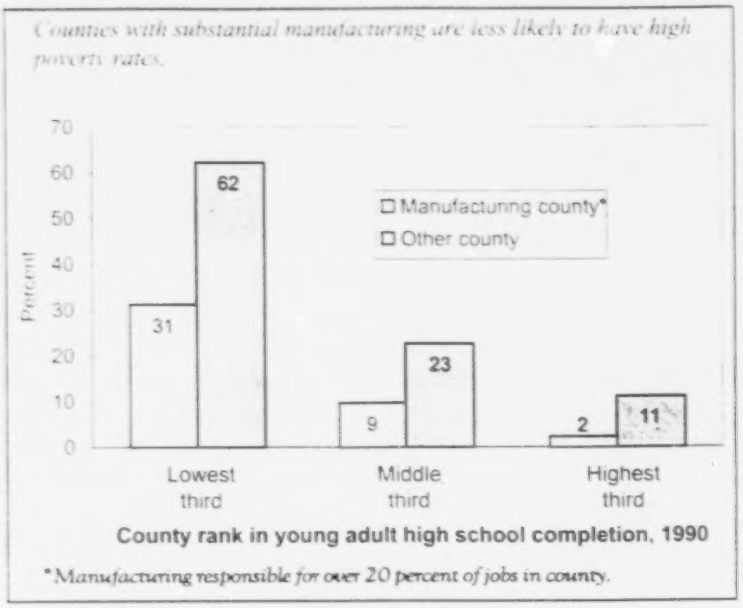
Thus, manufacturing appears to have improved as an employer on the one hand, but shifted out of some of the traditional rural manufacturing areas on the other. Some of the poorer areas of the rural South that benefited from manufacturing jobs in the past may be much less able to do so in the future.

Future prospects

During the 1988-98 period, manufacturing jobs declined nationally by 500,000, or 3 percent, according to the U.S. Bureau of Labor Statistics website [5]. During the same period, jobs in services industries increased by nearly 12 million, or 47 percent. Projections to 2008 suggest that the picture will be much the same over the next decade; stability in manufacturing, but continued gain in services, if at a slower decennial rate (33 percent).

The picture is quite different when one looks at the value of what is produced. Despite a decline in employment, manufacturing output increased nationally by a third during 1988-98 as its composition changed and its technology improved. Projections in manufacturing are particularly risky because they depend on foreign and domestic demand and continued technological change, but the projected gain in output for 1998-2008 is 45 percent. Output gains in services industries in 1988-98

Figure 1. Rural Southern counties with 1995 poverty rates over 25 percent.



Introduction

- Manufacturing employs a declining share of the U.S. workforce; however, it is still the most critical sector to Southern rural economies.
- Many Southern states, counties, small cities and towns want to attract and maintain manufacturing to anchor their local communities.

Issues

- Growth in high-tech services and industries has been in and around metropolitan areas, and rural areas must rely on gaining a larger share of different types of industries.
- Manufacturing is important to local economies where tourism, recreation or commuting is not strong.
- Manufacturing has helped to reduce poverty in the rural South.

Challenges

- Manufacturers historically moved to the South as part of a low-skill/low-wage strategy; however, trends have moved toward international relocation.
- In the past, manufacturers have hired low-skill workers, but new technologies call for higher education levels.
- Communities must overcome problems dealing with resources to attract manufacturers, labor force training and quality-of-life considerations.

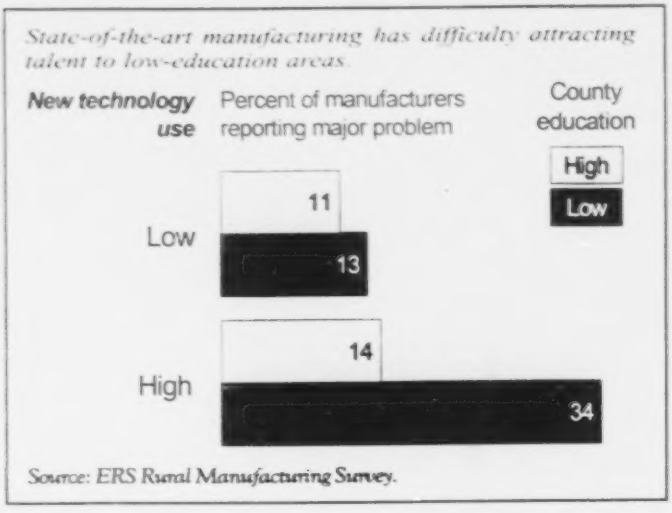
Conclusions

- A greater spreading of industries in the South, such as auto manufacturing, can help integrate rural communities and populations into the new economy.
- It is unclear whether rural areas have the financial, institutional or other means to adequately compete and attract manufacturing industries.

In contrast, rural counties gaining in auto industry jobs in 1989-97 had significantly lower poverty in 1997 than expected on the basis of poverty rates at the beginning of the period. The relationship was predictably stronger in low-education areas than high.

Rural areas with low education levels are not going to attract high-tech industries, which typically require a high proportion of professional and technical workers. The comparative advantage for these areas is relatively inexpensive labor, and where there has been manufacturing, a labor force that has some relevant experience. Perhaps the best opportunity for low-education areas is to try to attract new manufacturing that is a notch above apparel and textiles in terms of the skills needed. Some of the auto parts plants fall into this category.

Figure 3. Manufacturers reporting attractiveness of area to managers and professionals as a major problem.



Source: ERS Rural Manufacturing Survey.

There are, however, a number of problems that communities typically would need to overcome before this strategy could work. First, these are relatively poor counties without substantial resources. They cannot easily afford to grant major tax concessions without sacrificing some of the services and infrastructure needed to attract and support manufacturing industries. These counties already have under-funded school systems compared to other rural areas [2]. Thus, given the context of inter-local competition for new plants, these counties would need extra support to attract industrial investment. This may be difficult at the state level because towns trying to attract industry object to advantages being given to some towns over others.

Second, worker training has become an essential part of modern manufacturing. Many plants train on their own, but others draw on outside institutions. In rural areas, community colleges play an important role in labor force training, not only for employers in general, but often for particular plants. However, counties with low education levels tend to be relatively rural and lack community colleges and other institutions that could provide training. Community colleges do serve more than the town and county in which they are located, but distance always makes arrangements more difficult. Small plants are of greatest concern. Individually, these plants may not have the means to develop courses on their own or to justify the development of courses in conjunction with community colleges, but as a group, they may represent a substantial need that a community college could satisfy.

Third, quality-of-life considerations are important. Manufacturers using new technologies in low-education areas report three problems: the quality of available labor, the quality of local schools, and the attractiveness of the area to managers and professionals. These three far outweigh other complaints. These are weaknesses that need to be addressed no matter what course of economic development a low-education town or county pursues. What is not clear is the extent to which these counties have sufficient resources themselves to make needed improvements.

Conclusion

A recent report, "State of the South 2000," noted that while the South is increasingly a full participant in the modern global economy, many rural areas are being left out [4]. This is particularly true for rural areas that have relied on resource extraction and low-skill/low-wage manufacturing as their economic base.

The answer to this problem is not simply to create more jobs in these areas. Reliance on growing services industries may be questioned. For one, these industries tend to serve local populations and their potential for growth is generally limited. These industries also tend to pay less skilled workers relatively low wages, and the work is often part-time. Moreover, even if an area succeeds in attracting a larger share

of these industries, there is still a risk of a scarcity of jobs for men.

Low-skill manufacturing now has limited potential, given competition from industrializing nations and technological change in domestic manufacturing. Meat products manufacturing was a source of growth in the 1990s, but it did not always result in reduced poverty. On the other hand, other industries, most notably those related to auto manufacturing, have been moving to the South, and some have shifted to the low-education areas. A greater spreading of these and similar industries into the low-education areas would help integrate the areas and their populations into the new economy. There is substantial inter-local competition for these industries, however, and it is not clear whether these counties have the financial, institutional or other means to adequately compete.

References

[1] Beaulieu, Lionel J., Melissa A. Barfield and Katherine L. Stone. "Educated Workforce, Quality Jobs Still Elusive Goals in the Rural South." *Rural America* 15(4): 28-35. http://www.ers.usda.gov/publications/ruralamerica/ra154/ra154d.pdf

[2] McGranahan, David. "New Economy Manufacturing Meets Old Economy Education Policies in the Rural South." *Rural America* 15(4): 19-27. http://www.ers.usda.gov/publications/ruralamerica/ra154/ra154c.pdf

[3] McGranahan, David and Fred Gale. "Boon or Bust? New Technology Manufacturing in Low-Skill Rural Areas." http://www.ers.usda.gov/briefing/Industry/boonorbust/

[4] MDC, Inc. *State of the South 2000*. Chapel Hill, NC, 2000. http://www.mdcinc.org/state_of_the_south_2000.htm

[5] U.S. Bureau of Labor Statistics: http://stats.bls.gov/blshome.htm

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